

I claim:

1. A jounce bumper for a wheel suspension system of a vehicle including a first member and a second member displaceable relative to the first member along a line of travel, comprising:
  - a first flexible member disposed between said first and second member along the line of travel having a recess and an annular portion surrounding the recess therein aligned with the line of travel;
  - a second compressible member disposed between the first member and the first flexible member, having a portion thereof received within and seated in the recess; and
  - a ring member encircling the first flexible member,wherein upon a force applied along the line of travel between, the second compressible member collapses into the recess causing the annular portion to expand radially.
2. The jounce bumper assembly according to claim 1 wherein the ring member restricts the expansion of the annular portion.
3. The jounce bumper assembly according to claim 1 wherein the recess of the first flexible member and the portion of the second compressible member are provided with complimentary, arcuate surfaces.
4. The jounce bumper assembly according to claim 3 wherein the second compressible member includes a longitudinal axis aligned with the line of travel and a radius of the recess of the first flexible member.

5. The jounce bumper assembly according to claim 1 wherein the second compressible member is microcellular urethane.
6. The jounce bumper assembly according to claim 1 wherein the first flexible member is thermoplastic urethane.
7. The jounce bumper assembly according to claim 1 wherein the jounce bumper assembly is mounted on the strut assembly of the vehicle.
8. The jounce bumper assembly according to claim 7 wherein the first member is one of a cylinder of the strut and a portion of the suspension and the second member is the other of the cylinder of the strut and the portion of the suspension.
9. The jounce bumper assembly according to claim 8 wherein the second compressible member has an aperture along said longitudinal axis through which a shaft of the strut member passes.
10. The jounce bumper assembly according to claim 1 wherein a central axis of the ring is coaxial with the line of travel.
11. The jounce bumper assembly according to claim 1 wherein a height of the first flexible member in the direction of the line of travel is greater than the height of the ring member.

12. The jounce bumper assembly according to claim 1 wherein a height of the first flexible member in the direction of the line of travel is equal to the height of the ring member.
13. The energy absorption device according to claim 1 wherein the ring is made of a non-flexible, non-compressible material.
14. The energy absorption device according to claim 13 wherein the ring is made of a metal.
15. The energy absorption device according to claim 13 wherein the ring is made of plastic.
16. An energy absorption device insertable between a first member and a second member displaceable with respect to each other along a line of travel, said device comprising:
  - a flexible member disposed between said first and second member along said line of travel having a recess portion and an annular portion surrounding said recess portion; and
  - a compressible member disposed along said line of travel and having a portion thereof received in said recess; and
  - a ring disposed around the first flexible member in abutting relation therewith,
  - wherein upon a force applied along said line of travel, said second compressible member collapses into said recess causing said annular portion to expand radially.
17. The energy absorption device according to claim 16 wherein said recess of said flexible member and said portion of said compressible member are provided with complimentary, arcuate surfaces.

18. The energy absorption device according to claim 16 wherein said flexible member is thermoplastic urethane and said compressible member is microcellular urethane.
19. The energy absorption device according to claim 16 wherein the compressible member is microcellular urethane.
20. The energy absorption device according to claim 16 wherein the flexible member is thermoplastic urethane.
21. The energy absorption device according to claim 16 wherein the ring restricts the expansion of the annular portion.
22. The jounce bumper assembly according to claim 16 wherein a central axis of the ring is coaxial with the line of travel.
23. The energy absorption device according to claim 16 wherein a height of the flexible member in the direction of the line of travel is greater than the height of the ring member.
24. The energy absorption device according to claim 16 wherein a height of the flexible member in the direction of the line of travel is equal to the height of the ring member.
25. The energy absorption device according to claim 16 wherein the ring is made of a non-

flexible, non-compressible material.

26. The energy absorption device according to claim 25 wherein the ring is made of a metal.

27. The energy absorption device according to claim 26 wherein the ring is made of plastic.